



March 21, 2017

State Representative Ben Frederick
Chair, House Workforce and Talent Development Committee
House of Representatives
P.O. Box 30014
Lansing, MI 48909-7536

Re support for HB 4315 re 21st century skills credit requirements for high school diploma

Dear Chairman Frederick,

TechNet (www.technet.org) is the national, bipartisan network of over 70 technology companies that promotes the growth of the innovation economy by advocating a targeted policy agenda at the federal and 50-state level. TechNet's diverse membership includes dynamic startups to the most iconic companies on the planet and represents more than two million employees in the fields of information technology, e-commerce, clean energy, telecommunications, gig economy, sharing economy, venture capital, and finance. TechNet is committed to advancing the public policies and private sector initiatives that make the U.S. the most innovative country in the world.

On behalf of our membership, we respectfully request that the Workforce and Talent Development Committee support HB 4315, a bill similar to one last session (HB 5463) that passed the House of Representatives, which would allow a high school foreign language requirement to be fulfilled by the completion of a computer science or computer coding course.

The passage of HB 4315 would make a significant statement that the Legislature is serious about providing Michigan students the opportunity to learn computer science and coding, skills more valuable and necessary than ever to qualify for jobs in the technology and innovation sector that is driving our nation's new economy.

TechNet member companies strongly support legislation that provides incentives for expanded STEM, computer science and coding education. They prepare students to be problem solvers and innovators and teach computational thinking—logical data analysis and organization, the ability to create concise problem statements, the skills to identify

and implement algorithm-based solutions, and to generalize and extrapolate solutions that can be applied to other problems. Helping students develop these skills will be a benefit to them in every subject, in the classroom and beyond.

The technology and innovation sector that is driving today's job market needs a workforce trained in coding and computer science to sustain it. Nearly every industry today is driven by applied computer science. The Bureau of Labor Statistics estimates that, by 2018, computing occupations will grow by 21% - that's twice the national average. Right now, there are more than 150,000 job openings that require computing, with more than 14,000 in Michigan. These jobs pay 75 percent more than the national median annual salary. The average salary for a computing occupation in MI is \$75,913, which is significantly higher than the average salary in the state (\$45,140).

Regretfully, Michigan is not properly preparing their students for the technology and innovation economy workforce. Michigan had only **1,612 computer science graduates** in 2014; only **15%** were female. Only **936 high school students** in Michigan took the AP Computer Science exam in 2015; only **15%** were female; only **20** were Hispanic; only **16** were black. Only **103 schools** in MI (16% of MI schools with AP programs) offered the AP Computer Science course in 2014-2015. There are fewer AP exams taken in computer science than in any other STEM subject area.

If passed in to law, HB 4315 will send a strong signal that policy makers and the technology sector are working together in Michigan to provide students with the expanded opportunities they need to learn coding and computer science and offer them a path to future jobs in the innovation economy.

For the above reasons, we again ask that HB 4315 be moved favorably out of your Committee so that it has an opportunity to pass in to law this session. If you, your staff or the Committee has any questions or concerns, please consider TechNet a resource.

Respectfully,



Matt Mincieli
Executive Director, Northeast Region
TechNet
617-921-4760
mmincieli@technet.org

Cc: Ian Mays, Committee Clerk